

### REMARKS

Claims 1-25 and 29-31 are pending in the case. The Examiner's reconsideration of the objections and rejections is respectfully requested in view of the amendments and the remarks.

Applicants appreciate the Examiner's indication that claims 12-25 are allowed over the prior art of record, and that claim 31 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in the Office Action and to include all of the limitations of the base claim and any intervening claims.

Claim 31 has been objected to for failing to include the term "wherein" before "determining." The claim has been amended to insert the word "wherein." The Examiner's reconsideration of the objection is respectfully requested.

Claim 31 has been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner stated essentially that the term "the flexible instrument" lacks antecedent basis; the term "instrument" should be "endoscope." Claim 31 has been amended to replace the term "instrument" with "endoscope." Examiner's reconsideration of the rejection is respectfully requested.

Claims 1-11, 29 and 30 have been rejected under 35 U.S.C. 102(b) as being anticipated by Guthrie et al. (U.S. Patent No. 6,409,686). The Examiner stated essentially that Guthrie teaches all the limitations of claims 1-11, 29 and 30.

Claim 1 claims, *inter alia*, "parameterizing the flexible instrument according to a plurality of parameters for handling the instrument."

Guthrie teaches a mechanically encoded arm, tracked relative to a based, which is manipulated relative to a patient (see col. 2, lines 22-62). Guthrie does not teach “parameterizing the flexible instrument according to a plurality of parameters for handling the instrument” as claimed in claim 1. Guthrie’s system merely tracks observed positions of the arm. The encoded arm of Guthrie is not parameterized. The parameters for handling Guthrie’s arm are not known. A parameterized flexible instrument, as claimed in claim 1, is distinct from the tracked arm of Guthrie in that the system for tracking the arm has no knowledge about parameters for handling the instrument. Parameterizing the flexible instrument involves determining what is possible, i.e., “a plurality of parameters for handling the instrument” as claimed in claim 1, rather than merely what is observed. Indeed, it appears that the Examiner has recognized this distinction, as the Examiner noted “that Applicant might have intended determination of specific values of the parameters to be defining the ‘configuration determining’ step and not the parameterizing step, which merely recognizes variable representative values that can be used to define the physical aspects of the instrument.” Applicants appreciate the Examiner’s indication, however, claim 1 is correct as written, wherein parameterization involves recognizing variable representative values that can be used to define the physical aspects of the instrument. Note that it may not be possible to determine a correct configuration without such knowledge of the values that can be used for different parameters. Nowhere does Guthrie teach that the parameters for handling the arm are determined. Therefore, Guthrie fails to teach “parameterizing the flexible instrument according to a plurality of parameters for handling the instrument” as claimed in claim 1.

Claims 2-11, 29 and 30 depend from claim 1. The dependent claims are believed to be allowable for at least the reasons given for claim 1. The Examiner's reconsideration of the rejection is respectfully requested.

Claims 1-9 and 29 have been rejected under 35 U.S.C. 102(e) as being anticipated by Alft et al. (U.S. Patent Application No. 2003/0173113). The Examiner stated essentially that Alft teaches all the limitations of claims 1-9 and 29.

Claim 1 claims, *inter alia*, "parameterizing the flexible instrument according to a plurality of parameters for handling the instrument."

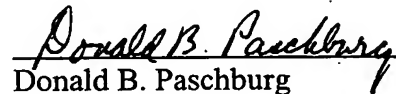
Alft teaches a method for planning a bore of the earth, such as for boring a hole for water, electricity, or gas lines (see paragraph [0003]). Alft does not teach "parameterizing the flexible instrument according to a plurality of parameters for handling the instrument" as claimed in claim 1. Alft teaches that a designer modifies bore path targets, recalculates the bore, and reviews the recomputed bore, repeating this process until the calculated bore is acceptable (see paragraph [0066]). In planning the bore the designer considers a reference system, topography, water regions and utility information (see Figure 3). However, Alft does not teach that the designer considers any limitation of the boring tool in determining the bore plan. Thus, Alft does not teach that the drill is parameterized according to a plurality of parameters for handling the instrument, essentially as claimed in claim 1. Therefore, Alft fails to teach all the limitations of claim 1.

Claims 2-9 and 29 depend from claim 1. The dependent claims are believed to be allowable for at least the reasons given for claim 1. The Examiner's reconsideration of the rejection is respectfully requested.

For the forgoing reasons, the present application, including claims 1 to 26 and 29-31, is believed to be in condition for allowance. The Examiner's early and favorable action is respectfully urged.

Respectfully Submitted,

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